

Income Inequality: Ideas on education and investment in human capital

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Social inequality is a popular global phenomenon at different level and scope. Social inequality can be viewed in many dimensions, for example, the inequality between social classes, nations, regions and gender so on. If viewing from gender research and development, gender inequality is reflected through politics, leader management and the rights to make decision, etc. And, the income inequality between male and female is the most obvious. There are various reasons explaining for this income inequality by gender (job types, economic sectors, residence, types of business ownership...) Ideas on education and investment in human capital were used for explaining the income inequality by gender through this article.

I. Theory of education and investment in human capital

1. The concept of Human Capital

Though investing in education has long been widely held belief that dates back all the way to Adam Smith's times, however, the concept of human capital was developed in 1960s by an economic group working in the University of Chicago [See 5; 9, 73-134].

Human capital is defined as "investments in education, training, medical to improve individual's working efficiency inside and outside labor market" [4, 3]. Some other concepts of human capital mentioned to the creative ability as well as knowledge or skill which a person can achieve in their

lifetime. The term "human capital" is used for describing useful and valuable knowledge that a human can learn through education and training. This article's definition of human capital as below: It is knowledge, skills, capabilities and qualities of a person which can create the prosperity for individual, community and society.

2. Theory of investment and education in human capital

Many viewpoints agree with the investment in education will increase human capital. The interest in this topic can be found out in scientific research

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works as well as documents about public policies, including the US Presidential campaigns. Both Clinton and Bush stressed on increasing the educational level and working skills. They even not hesitate to use the term “investment in human capital” to describe the progress of improving labor force’s quality [6].

Economists listed out three traditional factors about production: land, labor and capital. Since early years of 1960s, there are more and more attention paid on working quality, especially the education and training level of labor force. As a result, human capital concept was created in which personal skills and other characteristics will benefit not only themselves, but also economy and whole society. Skills and capabilities are normally achieved through either learning and experiences, or innate ability. Some dimensions of motive and behaviors as well as some other qualities as health, emotion and knowledge of individuals can be considered as “human capital”. “Human capital” is normally defined and measured by referring to skills about clear knowledge achieved. However, there is a wider concept of human capital which includes qualities and fully reflects unconscious skills which have contribution to the security. They might be impacted and changed by external environment and learning progress is included. Human capital is also grown up in specific cultural circumstances.

Human capital therefore is highly diversified. These skills and capabilities can be considered as general abilities

(speaking, writing and reading) or specified abilities with high level in different circumstances. Differ from capital, human capital is inside each person and it has grown up through usage and experiences at working and non – working environment, in full time or part time study. Human capital, however, tends to decrease if there is no demand. Some skills will get worse together with increasing age and this progress somehow explained the oblivious downward in human capital measure (or at least those extra money related to a certain educational level) exceeding a certain age range [10]. As a result, human capital cannot be considered as a group of similar and fixed skills or abilities that a person only need to achieve one time.

II. Gender inequality between income and human capital

1. Human capital and Income

Income distribution of individual from work is partly decided by human capital and revenue from human capital. Mincer has offered the method to analyze the linkage between income distribution from work and human capital [10].

G. Becker, who was awarded Nobel Memorial Prize in Economic Sciences in 1992, made persuasive conclusion about the relationship between education and income in his and his co – worker’s empirical research. Firstly, the average income 1) Per capita income of university (higher) education for white men is from 11% to 13% and this rate is higher than the high school education

and much higher than primary school; Secondly, university graduates earn more than those have only high school degree. The reason is university graduates have higher competitive ability with more desire. Also they are well educated and even have better family background. And, thirdly, the ratio is different by social groups: Higher education's ratio is higher for white men when comparing between urban and rural, and lower for white women in comparison with black women.

The social development has pointed out that the expansion of scientific and technological intellectuals has increased the working efficiency as well as returns from operating expense. The progress of education and training for intellectuals development is reflected through human (scientists, managers, technicians so on) who contributed to the improvement of working efficiency, product quality and price reduction.

S. Kuznets, who was awarded the 1971 Nobel Memorial Prize in Economic Sciences, had same opinion about the role of human capital. According to S. Kuznets, the materials used by a developed country are not properties of that country, but "people with knowledge achieved from tested findings, empirical research as well as effective training" [15, 39].

Many research works have proved that education helps each individual proceed and apply knowledge, skills, and new ideas. Working efficiency, health and

nutrition therefore get improved. Also, the birth rate could be controlled, poverty decreased and income increased. The importance of human capital in current labor market is reflected through income distribution between those own physical capital and those own knowledge or skills. Up to 1990 – a new period when human capital was globally admitted, intellectuals have become the motivating factor of economic development due to the birth of the knowledge economy.

2. Income Inequality: human capital's viewpoint

2.1. Income Inequality: a global phenomena

The income difference between woman and man is a popular phenomenon in the world. Sweden has the highest rate of income equality between male and female as at 80%, Canada as at 65 -70%. In US, the gap between income of female and male only slowly reduce. Female income was only 69.2% comparing with male in 1986 and it was up to 76% in 2001 [7, 83].

According to Ann Oakley, British women's income per week is only 63% of men in 1978 and 72% in 1998. It is 62% in 1970 and 75% in 1996 in US, and, considered as an improved rate. Sociologists also forecasted that it will take 20 years to clear the income gap [1]. A. Giddens and his co – workers commented that the gap of income (by gender) is a widely accepted reality. In 2002, female income was only 78% of male income [2, 287]. Statistic figures

showed that the gap of income has reduced 17% after 30 years in US. It took near 2 years to reduce 1% of the income gap between men and women (Figure 1).

In Vietnam, research works pointed out that women has lower income than men in all industry. In 2004, a Vietnamese woman earned 83% of man's salary in cities and 85% of man's salary in rural [14, 42]. Income inequality by gender reflected the combination of factors as education level, specialization, experience and other reasons plus the discrimination.

Figure 2 showed that the income by gender, for those who did not have any training, low education, the gap would be higher (larger) than those had skills or high education. In East Asian countries,

education level also significantly impact the salary difference by gender. In general, the higher education level is, the larger the income gap by gender is. "In

2004, female income was only 69% of male income for those graduated from University and 63% for those only finished high school in Japan. A recent

Figure 1: Average income per week of men and women in 1980 and 2010 (USD) (16)

	Both	Men	Women	Income rate of women against men (%)	Income Gap by gender (%)
1980	262	313	201	64	36
2010	747	824	669	81	19

Figure 2: Average income per month of labor started working at the age of 15 by gender and specialization level in 2010

Unit: thousand dong

	Both	Men	Women
<i>Country</i>	2.519	2.668	2.297
<i>Highest education level achieved</i>			
Not been in schools	1.496	1.676	1.281
Not finish primary schools	1.733	1.929	1.422
Primary graduates	1.948	2.111	1.665
Secondary graduates	2.154	2.284	1.929
High school graduates	3.055	3.253	2.796
<i>Specialized level</i>			
Never been trained	2.108	2.270	1.844
Job training	2.944	3.092	2.466
Professional High school	2.472	2.621	2.352
College	2.835	3.023	2.725
University and Post - Graduate	4.018	4.256	3.722

Source: Gender Statistical Figures in Vietnam (2000-2010).

research on income gap by gender in Bangladesh done by ILO (Bangkok) has shown that women who only completed primary schools had 20% lower income

than men while this rate was only 4% for those completed high school [11].

2.2. Explanation on income inequality by gender through human capital

According to the UN experts, education is the vital reason to explain the income inequality and, it is a remarkable difference in salary based on qualification of labor [17]. Women have the double inequality in income if viewing from gender perspective: barrier to increase the human capital and discrimination in recruitment.

The reason of income inequality can be the level of degree, work position, ability and extra working hours. A person can either play an important role at work or has a high position in a specific project. Single women will have more opportunities than working moms. Salary, moreover, tends to be higher in FDI areas than local investment areas. Working moms or those have family burden and aged women are those have to leave first even they are experienced and skillful [12].

Sociologists and economists have different explanation for the difference

or inequality of income between men and women. Following are some examples:

Human Capital difference (human

Figure 3: Gender Difference by qualification level of people at working age in 2010

	Total	Men	Women
<i>Highest qualification achieved</i>			
Not been school	100,00	46.13	53.87
Not finish primary school	100,00	48.66	51.34
Graduated from primary school	100,00	51.23	48.77
Secondary school graduates	100,00	52.97	47.03
High school graduates	100,00	59.54	40.46

Source: Author created figure based on gender statistics ở Việt Nam năm 2000-2010.

Figure 4: Specialize technical qualification achieved by population (age above 15) by gender in 2009

Unit: %

	Primary	Secondary	College	University	Post Graduates
Man	3,7	5,5	1,4	4,8	0,3
Woman	1,5	4,0	1,8	3,5	0,1

Source: Ministry of Planning and Investment, 2011.

resource quality): the key point of salary differentiation is the quality difference between individuals. It is the natural difference of energy and mental ability, education, training as well as experience. A sociologist will classify people into modern human group but some HR staff will group us by the contribution ability to company's operations. The different quality of labor is normally from non – financial factors but human capital can be considered as a financial factor.

According to human capital concept, Vietnamese labor's education level is as below: In 2009, the rate of men who can read and write was 95,8% while women's rate was 91,4%. The different level was higher at poor economic and social conditions. Also, women normally have lower education as well as specified skills than men (Figure 3 and Figure 4).

Figure 4 showed that there was only 4.8% of men (age over 15) have skills and qualification at university level, higher than women's rate (3.5%); similarly, only 0.3% of men who had university qualification, more than women's rate (0.1%) three times.

- *Gender division in labor market*: This division has negative impacts on female labor. Labor market is divided into two types based on researches on developed economy: a) *Primary labor market* requires high level of technical skills. Offering professional, well – paid and stable jobs in good working conditions, this market's labor is basically men; and b) *Secondary labor market* provides jobs which do not require high skills or qualification. Hence, they are low paid job which are not stable and have poor working conditions. Women are major labor force in this market type.

It is the impacts of different ideas on gender in education and training led to such division. Those ideas started from behavior model of gender role based on traditional concept. There are some jobs which are more suitable with woman so families tend to pick teaching, health

care, social services, etc as a future choice for girls. These factors affect job types that men and women will be in charge in future.

Role of gender: Women normally are major factor in the progress of kid socialization. It indirectly limited their career opportunities because women have to choose jobs that enable them to balance the responsibility at company and house [18].

III. Discussion

Some questions are raised to find out the answer for gender inequality in the relationship of income and human capital. They also suggested the approach of figuring benefits of investment and education in human capital.

Firstly, labor market has discrimination: Will female labor receive lower salaries even they have similar working efficiency with male labor?

Secondly, labor market's external factors: Do female labor has lower working quality, for example, low qualification or lack of experience, in comparison with male labor? And will this decrease their salaries?

Thirdly, these inequalities are due to female labor's choices or market discriminated them?: Lacking of chances to pursue a higher qualification or to work for obtaining more experiences; social factors like female students are unable to learn Mathematics or excellent female students still have to

get married in the end. As a result, female students are not required to be good at doing Mathematics or even study.

The term “human capital” is used for useful and precious knowledge that people achieved through learning and training. Sociologists about women power, however, disagreed with economists’ “human capital” when this theory do not take into account “the difference between power of men and women in working fields and society” [2, 289].

If there were not barriers (old thoughts as girls are another family’s kid) against women and girls to join in the education or training progress, the gap of human capital between men and women would have been reduced. It means that there are more opportunities for women to work in the primary labor market as well as shorten the income gap. World Bank’s research works [19, 13] provided us some conclusion as following: a) Investment in women development will be much more efficient because a healthy and intelligent woman will contribute more to the growth; b) Education investment in women is an investment type which benefits both family and society.

In conclusion, removing barriers which are against women and girls to access education, and create gender equality in training will be important factors that can shorten the inequality gap of income between men and women □

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